

# JOHN DEERE "GATOR" LICENSING & CERTIFICATION TRAINING





# AGENDA

- JOHN DEERE SAFETY VIDEO
- GATOR  
SPECIFICATIONS/CAPABILITIES
- OWNERS MANUAL OVERVIEW
  - Warnings/Cautions/Notes
  - Operating Restrictions
  - Servicing
  - Trailer Operations



# **SPECIFICATIONS**

- **4-Cycle, 3-Cylinder, Diesel**
- **1050  $\pm$  25 RPM at Idle**
- **3650  $\pm$  25 RPM MAX**
- **Cooling System - Liquid Cooled 5.2 Quarts**
- **Exhaust - Spark Arresting Muffler**
- **Halogen Headlights**
- **Fuel Capacity = 20 Liters/5.25 Gallons Diesel**
- **Engine Crankcase = 2.3 Quarts of Oil**
- **Auto Transmission (FWD HI & LO/NEUTRAL/REVERSE)**
- **Drive Train = Belt-Driven Torque Converter with Gear-Driven Transaxle**
- **Ground Speeds - 0 to 40 KM/H or 0-25 Mph**



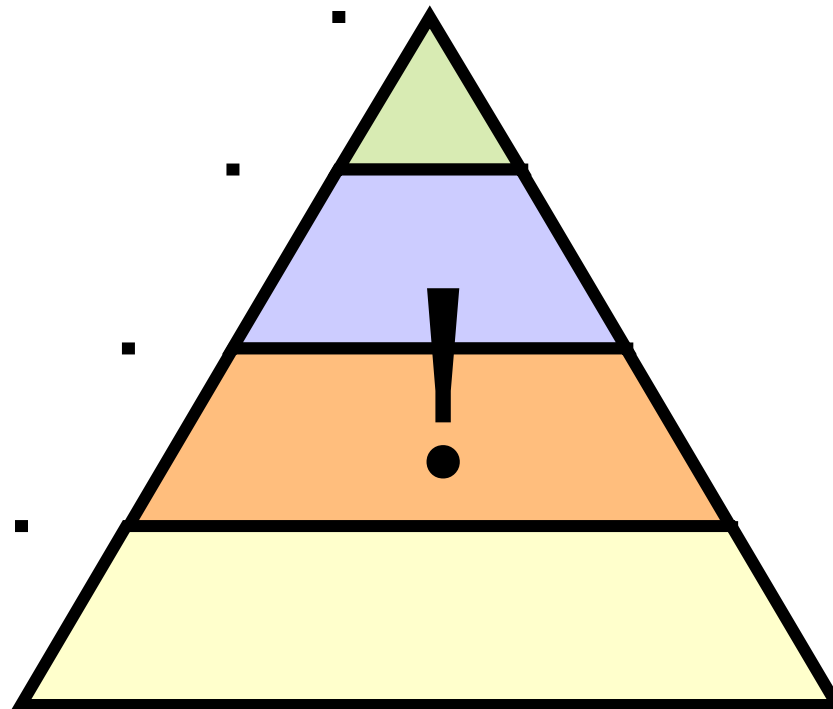
# **SPECIFICATIONS**

- **Weight = 1402 lbs**
- **Seating Capacity = 2**
- **Towing Capacity = 1,300 lbs**
- **Payload Capacity of Trailer = 1,000 lbs**
- **Cargo Box Capacity = 900 lbs**
- **Tires (4 each) 24 inch Front/24 inch Rear**  
**Inflate only to 7 psi Front and 14**  
**Rear!!!!!!!!!!**
- **Wheel Bolt Torques = 60 ft/lbs**

# SAFETY

Warnings/Cautions/Notes

As per the John Deere Operator's  
Manual OMVG12162 C4





# Warnings

- RIDERS CAN FALL OFF AND BE KILLED
  - Maximum of one person per seat
  - No Riders in Box or anywhere else

# Warnings

- ROLLOVER OR FALLING OFF MAY CAUSE DEATH
  - Read Operators Manual
  - Drive SLOWLY when turning
  - Use brakes when going down slope - Vehicle can “free-wheel” downhill
  - No loads > 900 lbs, 1,000 for Trailer
  - Secure/Tie down loads
  - Reduce Speed on rough/hilly ground

# Cautions

- Before Starting Vehicle
  - Do not start engine by shorting across starter terminals. Bypassing normal circuitry will allow machine to start in gear
  - NEVER start engine while standing on ground, start engine only from operator's seat





# Cautions

- Before Leaving Vehicle
  - STOP Engine
  - Set Parking Brake
  - Remove Key and secure

# Cautions

- Battery Dangers

- Explosive Gases can cause blindness or injury
- No Sparks/Flames/Smoking in vicinity of vehicle
- Sulfuric Acid can cause blindness or severe burns
- Flush eyes immediately w/water and get Medical Help



# Cautions

- **HELP PREVENT INJURY WHEN DUMPING LOADS** – for machines with cargo box power-lift option only
  - Operate dump w/ machine stationary and parking brake locked. Never dump when moving.
  - Level Ground Only from operators seat only
  - Do NOT place hands behind seat when lowering box
  - Evenly distribute your loads

# Vehicle Operations Inside Hanger

- Ground guide a must!
- ID protruding objects – maint stands, etc.
- Vehicle speed will not exceed a **slow** walk!
- Yield right of way to towed aircraft

Best Bet = Avoid operating vehicles inside hanger as much as practicable



# Speed Limits

- Ramp speed = 15 mph
- Within 10' aircraft = 5 mph
- Towing = brisk walk
- Ground guide in close proximity to aircraft (Within 10 Feet)
- Yield to moving aircraft

# Operating in “Close Proximity”

- No parking within 10’ of aircraft unless the Engine is Off, Parking Brake Set
- No parking/operating closer than 50’ from operating aircraft
- Approach to aircraft is critical! Approach with driver’s side toward aircraft and do not “aim” at aircraft

# General Information



- Drivers must be licensed, and their qualification to drive the GATOR must be annotated on their SF 348/346.
- **Helmet and eye protection** are required for **both** driver and passenger if driving off the ramp/off road.
- The maximum speed is 15 mph, operators will not exceed that speed.
- The GATOR will not be driven on public roadways except to cross the road at designated crossing points, or with a road guard.
- Passengers may not ride in the cargo area. Cargo weighing more than 50 lbs must be should in the cargo bed.



# Licensing

- Drivers will complete training prior to ramp operations including achieving 70% on appropriate airfield/airbase flight line test.
- SF346 or other driving records will be properly stamped “Flight Line Qualified” and/or Gator Qualified by unit master driver.
- Training documentation will be kept by the ASO and will include Names, Rank, SS#, Unit Assigned and dates of training.



# Operating Procedures and Directives



- 1. Operators will adhere to the USAPT training, licensing and operating procedures of the Gator vehicle.
- 2. Prior to operating the Gator personnel will attend a formal class taught by the designated trainer. As a minimum personnel will view the instructional video tape, this presentation, a written general knowledge test, a driving test and perform a hands-on PMCS.

# Operating Procedures and Directives



- 3. The following procedures will be adhered to:
  - a. A PMCS will be conducted on the vehicle before use.
  - b. Personnel will obey flight line speed limits IAW this training and/or Current Airfield Directives. The most stringent guidelines are applicable. (15 mph max ramp speed, 5 mph (Brisk Walk) within 10 feet of an aircraft) at all times.
  - c. Personnel will ride only in the provided seats of the vehicle. At no time will individuals be transported in the cargo area of this vehicle
  - d. Vehicles will not be left unattended when the engine is running.

# Operating Procedures and Directives



- e. Vehicles will yield the right-of-way to taxiing or towed aircraft.
- f. Vehicle lights are mandatory during times of poor visibility and at night. Personnel will wear a Helmet and eye protection at a minimum when operating off road.
- g. Vehicles will not be operated beyond the hangar/ramp areas without the approval by the Commander. If operation is required on any roadway, vehicle lights will be on, and the driver will wear a reflective vest or belt. Hand and arm signals will be used to indicate intentions to other vehicular traffic.

# Operating Procedures and Directives



- h. If load security is in question, cargo straps will be used to secure the loads. The load security is the responsibility of the senior-occupant and will not exceed vehicle load limits.
- i. The Gator will not be used to tow any aircraft.
- j. When entering and exiting the hangar facilities, the vehicle will be stopped just prior to the hangar door, and the driver will ensure the area is clear of personnel and equipment before proceeding.
- k. Legs will remain inside the vehicle during movement. Personnel will not exit the vehicle until movement has stopped.

# Operating Procedures and Directives



- l. A ground guide will be used if the vehicle is being backed into, or out of the hangar or in close vicinity of aircraft.
- m. The vehicle will not be operated within 50 feet of an aircraft with engine(s) operating or a refueling operation.
- n. When refueling the Gator it will be treated as any other vehicle and all safety precautions will apply. Hot-refuel of this vehicle (when engine is running) is not authorized.



# Driving Safety

- Climbing/Descending Hills
  - Always use Brakes going down hill to prevent “Free-Wheeling”
  - Driving Across Slopes – When on Soft Terrain turn wheels slightly uphill to keep vehicle straight
  - If vehicle begins to “tip over” turn front wheels Downhill to regain control
  - Never Cross body of water where depth unknown. >6 inches of water may cause tires to float making control difficult to maintain
  - Do NOT modify the machine
  - Tire Safety – Explosive separation of tire and rim parts can cause serious injury/death = Correct Tire Pressure, use clip on chuck extensions and stand to one side when inflating



# Driving Safety

- Never Fill Gas Cans in back of vehicle
- Engaging/Disengaging Traction assist must be done less than 10 MPH
- Do NOT shift gears when engine above idle or vehicle moving
- Do NOT operate Starter for >20 seconds
- Never use starting fluid to start engine
- Allow 3-5 Seconds to preheat igniters prior to engaging starter
- Allow engine warm-up, 2-3 Minutes
- If being run hard allow cool-down at idle for 2-3 minutes to allow engine cool-down



# Driving Safety

- Power Lift – Avoid Damage!! A “hissing” or “squealing” sound when cargo box fully raised indicates the the hydraulic system is operating at pressure relief. Minimize operation at pressure relief
- Allowing the Power Lift hydraulics to operate at pressure relief “briefly” after box fully lowered will keep cargo box secure and reduce rattling/vibrations
- Hour-Meter will run anytime key is in “RUN Position”
- Do NOT drive vehicle with tailgate unsupported and hanging down, it will contact tires





# Service Intervals

- DAILY
  - Test Safety Systems
  - Check Tire Pressure
  - Fuel Level
  - Engine Oil Level
  - Remove grass and debris from engine compartment, muffler area, and front grille, before and after operating machine
  - Clean air intake
  - Check area below machine for leaks
  - Check drive belt
  - Check brakes and park brake operation

# SERVICE INTERVALS

- BREAK IN:
- 5 Hours - Check and tighten hardware, tire pressure, engine oil level, radiator screen and air intake tube
- 10 Hours- Check and tighten wheel bolts to correct torque
- 25 Hours- Change engine oil and filter

# SERVICE INTERVALS

- ROUTINE SERVICES:
- Every 50 Hours - Check tire pressure, clean operator's station and engine compartment, check coolant level, tighten hardware, drive belt condition, inspect battery and clean if necessary, clean front grille, check air intake, lubricate drive line, check brake fluid level
- Every 100 Hours - Check transaxle oil level, air cleaner dust unloading valve and air cleaner element



# SERVICE INTERVALS

- Every 200 Hours or Annually (whichever comes first) - Check and tighten wheel bolts to correct torque, change engine oil and filter, change air cleaner element, change fuel filter, clean primary drive clutch, adjust engine valve clearance (see dealer for this)
- Every 500 Hours - Replace drive belt, change engine coolant, check spark arrestor if installed
- Every 800 Hours or 24 Months (whichever comes first) - Change transaxle oil and change AWD oil

# Trailer Operations

- Cautions:

- Overweight loads causes loss of stability
- Do not exceed 1,000 lbs trailer weight
- Towing unit and operator combined weight must exceed loaded trailer weight
- Reduce weight of load when operating on sloped and/or slippery surfaces

# Trailer Operations

- **CAUTIONS:**
- **ATTACHING:** Before attaching trailer to vehicle make sure trailer bow is latched, dump lever is pushed back into notch on latch bracket, transport latch is against dump lever
- **REMOVING:** Before you remove trailer from vehicle make sure the trailer is empty, block trailer wheels, ensure dump lever is pushed back into notch on latch bracket, transport latch is against dump lever, feet are kept clear from under drawbar and from under the trailer.



# Trailer Operations

- Riders are not allowed in the trailer
- Avoid tipping and skidding
- A safe load on dry, level ground may cause the vehicle to lose traction and skid on slippery or sloped ground. REDUCE SPEED AND SIZED OF LOAD IF ON SLIPPERY OR SLOPED GROUND
- Do not use trailer near the edge of a ditch or bank, avoid holes, rocks and roots and slow down before you turn
- Do not make sharp turns that cause vehicle tires to rub trailer drawbar or trailer box
- Do not tow trailer with box raised
- Do not operate vehicle at high speeds when you tow the trailer



# CONCLUSION

- Training Annotation on SF 348 and SF 346
- Carry your license on person
- Leader Involvement
- Maintenance Tracking/Logbooks
- Common Sense and care around aircraft/airfields
- Commander's Guidance...Driving is a privilege....easy to LOSE this privilege!!!
- Be the Safety Officer.....on-the-spot corrections
- Be Professionals!